## FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO Louisiana-Pacific Corporation

AUTHORIZING THE OPERATION OF Jasper Oriented Strandboard Mill Jasper (OSB) Mill Reconstituted Wood Products

LOCATED AT
Jasper County, Texas
Latitude 30° 53' 40" Longitude 93° 55' 45"
Regulated Entity Number: RN100215169

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No:	01198	Issuance Date: _	June 8, 2016	
For the Co	mmission			

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#### **General Terms and Conditions**

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

### Special Terms and Conditions: Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

- 1. Permit holder shall comply with the following requirements:
  - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
  - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.
  - C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

- D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.
- E. Emission units subject to 40 CFR Part 63, Subparts DDDD, QQQQ, and ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, § 113.870, § 113.1000, and § 113.1090 which incorporates the 40 CFR Part 63 Subparts by reference.
- 2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
  - A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
  - B. Title 30 TAC § 101.3 (relating to Circumvention)
  - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
  - D. Title 30 TAC  $\S$  101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
  - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
  - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
  - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
  - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
  - I. Title 30 TAC § 101.222 (relating to Demonstrations)
  - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
- 3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
  - A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
    - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
    - (ii) Title 30 TAC § 111.111(a)(1)(E)
    - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)

- (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
  - (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
  - (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.
  - (3) Records of all observations shall be maintained.
  - **(4)** Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet. but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

- (5) Compliance Certification:
  - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
  - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
  - (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.
- B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:
  - (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
  - (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)
  - (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
    - (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the

- air emission source or enclosed facility is not operating for the entire quarter.
- (2) Records of all observations shall be maintained.
- (3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

#### (4) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader
- C. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)
- (iii) For a source subject to 30 TAC  $\S$  111.111(a)(8)(A), complying with 30 TAC  $\S$  111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC  $\S$  122.146:
  - (1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.
  - (2) Records of all observations shall be maintained.
  - (3) Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
  - (4) Compliance Certification:
    - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)
    - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the

source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- F. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
  - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
  - (ii) Sources with an effective stack height ( $h_e$ ) less than the standard effective stack height ( $H_e$ ), must reduce the allowable emission level by multiplying it by  $[h/H]^2$  as required in 30 TAC § 111.151(b)
  - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
- G. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:
  - (i) Title 30 TAC § 111.205 (relating to Exception for Fire Training)
  - (ii) Title 30 TAC § 111.207 (relating to Exception for Recreation, Ceremony, Cooking, and Warmth)
  - (iii) Title 30 TAC § 111.209 (relating to Exception for Disposal Fires)
  - (iv) Title 30 TAC § 111.211 (relating to Exception for Prescribed Burn)
  - (v) Title 30 TAC § 111.219 (relating to General Requirements for Allowable Outdoor Burning)
  - (vi) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)
- 4. Permit holder shall comply with the following 30 TAC Chapter 115, Subchapter C requirements:

- A. When filling stationary gasoline storage vessels (Stage I) for motor vehicle fuel dispensing facilities specified in 30 TAC Chapter 115, Subchapter C, the permit holder shall comply with the following requirements:
  - (i) Title 30 TAC § 115.221 (relating to Emission Specifications)
  - (ii) Title 30 TAC § 115.222 (relating to Control Requirements)
  - (iii) Title 30 TAC § 115.223 (relating to Alternate Control Requirements)
  - (iv) Title 30 TAC § 115.224 (relating to Inspection Requirements)
  - (v) Title 30 TAC § 115.225 (relating to Testing Requirements)
  - (vi) Title 30 TAC § 115.226 (relating to Recordkeeping Requirements)
- B. When filling gasoline storage vessels with a nominal capacity greater than 1,000 gallons (Stage I) at motor vehicle fuel dispensing facilities, which have dispensed less than 100,000 gallons of gasoline in any calendar month after October 31, 2014, the permit holder shall comply with the following requirements specified in 30 TAC Chapter 115, Subchapter C:
  - (i) Title 30 TAC § 115.222(3) (relating to Control Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors
  - (ii) Title 30 TAC § 115.222(6) (relating to Control Requirements)
  - (iii) Title 30 TAC § 115.224(1) (relating to Inspection Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors
  - (iv) Title 30 TAC § 115.226(2)(B) (relating to Recordkeeping Requirements)
- 5. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
  - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
  - B. Title 40 CFR § 60.8 (relating to Performance Tests)
  - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
  - D. Title 40 CFR § 60.12 (relating to Circumvention)
  - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
  - F. Title 40 CFR § 60.14 (relating to Modification)
  - G. Title 40 CFR § 60.15 (relating to Reconstruction)
  - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)

- 6. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.
- 7. The permit holder shall comply with certified registrations submitted to the TCEQ for purposes of establishing federally enforceable emission limits. A copy of the certified registration shall be maintained with the permit. Records sufficient to demonstrate compliance with the established limits shall be maintained. The certified registration and records demonstrating compliance shall be provided, on request, to representatives of the appropriate TCEQ regional office and any local air pollution control agency having jurisdiction over the site. The permit holder shall submit updated certified registrations when changes at the site require establishment of new emission limits. If changes result in emissions that do not remain below major source thresholds, the permit holder shall submit a revision application to codify the appropriate requirements in the permit.

#### **Additional Monitoring Requirements**

- 8. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached "CAM Summary" upon issuance of the permit. In addition, the permit holder shall comply with the following:
  - A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).
  - B. The permit holder shall report, consistent with the averaging time identified in the "CAM Summary," deviations as defined by the deviation limit in the "CAM Summary." Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions). Monitoring data below a minimum limit or above a maximum limit collected during the start-up of the control device or during regular maintenance of the control device like WESP flush cycles are not considered deviations.
  - C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "CAM Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).
  - D. The permit holder shall operate the monitoring, identified in the attached "CAM Summary," in accordance with the provisions of 40 CFR § 64.7.
  - E. The permit holder shall comply with either of the following requirements for any particulate matter capture system associated with the control device subject to CAM. If the results of the following inspections indicate that the capture system is not working properly, the permit holder shall promptly take necessary corrective action:

- (i) Once per year the permit holder shall inspect any fan for proper operation and inspect the capture system used in compliance of CAM for cracks, holes, tears, and other defects; or
- (ii) Once per year, the permit holder shall inspect for fugitive emissions escaping from the capture system in compliance of CAM by performing a visible emissions observation for a period of at least six minutes in accordance with 40 CFR Part 60, Appendix A, Test Method 22.
- F. The permit holder shall comply with either of the following requirements for any capture system associated with the VOC control device subject to CAM. If the results of the following inspections indicate that the capture system is not working properly, the permit holder shall promptly take necessary corrective actions:
  - (i) Once a year the permit holder shall inspect the capture system in compliance of CAM for leaks in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppm above background or as defined by the underlying applicable requirement; or
  - (ii) Once a month, the permit holder shall conduct a visual, audible, and/or olfactory inspection of the capture system in compliance of CAM to detect leaking components.
- G. The permit holder shall comply with either of the following requirements for any bypass of the control device subject to CAM. If the results of the following inspections or monitoring indicate bypass of the control device, the permit holder shall promptly take necessary corrective actions and report a deviation:
  - (i) Electronically monitor the position of the abort damper or each dryer by means of a limit switch. The position of the damper, either open or closed is continually recorded in the mill's manufacturing server. Anytime the abort damper is in the open position when the process is operating, a visual and audible alarm is sent to the dryer control room. Each time an alarm is received record the date, start time, stop time, cause, and corrective action, and an indication that a deviation occurred for the inclusion in the semi annual report.
- H. The permit holder shall comply with the requirements of 40 CFR § 70.6(a)(3)(ii)(A) and 30 TAC § 122.144(1)(A)-(F) for documentation of all required inspections.
- 9. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in

particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

#### **New Source Review Authorization Requirements**

- 10. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
  - A. Are incorporated by reference into this permit as applicable requirements
  - B. Shall be located with this operating permit
  - C. Are not eligible for a permit shield
- 11. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
- 12. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

#### **Compliance Requirements**

- 13. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
- 14. Use of Discrete Emission Credits to comply with the applicable requirements:
  - A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:

- (i) Title 30 TAC Chapter 115
- (ii) Title 30 TAC Chapter 117
- (iii) If applicable, offsets for Title 30 TAC Chapter 116
- (iv) Temporarily exceed state NSR permit allowables
- B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
  - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
  - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
  - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
  - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
  - (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

#### **Protection of Stratospheric Ozone**

- 15. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:
  - A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.
  - B. Any on site servicing, maintenance, and repair of fleet vehicle air conditioning using ozone-depleting refrigerants shall be conducted in accordance with 40 CFR Part 82, Subpart B. Permit holders shall ensure that repairs or refrigerant removal are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart B.

#### **Temporary Fuel Shortages (30 TAC § 112.15)**

16. The permit holder shall comply with the following 30 TAC Chapter 112 requirements:

- A. Title 30 TAC § 112.15 (relating to Temporary Fuel Shortage Plan Filing Requirements)
- B. Title 30 TAC § 112.16(a), (a)(1), and (a)(2)(B) (C) (relating to Temporary Fuel Shortage Plan Operating Requirements)
- C. Title 30 TAC § 112.17 (relating to Temporary Fuel Shortage Plan Notification Procedures)
- D. Title 30 TAC § 112.18 (relating to Temporary Fuel Shortage Plan Reporting Requirements)

#### **Permit Location**

17. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

#### Permit Shield (30 TAC § 122.148)

18. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

#### Attachments

**Applicable Requirements Summary** 

**Additional Monitoring Requirements** 

**Permit Shield** 

**New Source Review Authorization References** 

Unit Summary	16
Applicable Requirements Summary	<sup>7</sup> 18

Note: A "none" entry may be noted for some emission sources in this permit's "Applicable Requirements Summary" under the heading of "Monitoring and Testing Requirements" and/or "Recordkeeping Requirements" and/or "Reporting Requirements." Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

### **Unit Summary**

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
FWP-1	SRIC Engines	N/A	63ZZZZ-FWP-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRPDRYER	Emission Points/Stationary Vents/Process Vents	DRYER1, DRYER2, DRYER3, DRYER4, DRYER5	R1151-1	30 TAC Chapter 111, Nonagricultural Processes	No changing attributes.
GRPDRYER	Plywood and Composite Wood Products	DRYER1, DRYER2, DRYER3, DRYER4, DRYER5	63DDDD- DRYERA	40 CFR Part 63, Subpart DDDD	Reduce total HAP by 90%
GRPDRYER	Plywood and Composite Wood Products	DRYER1, DRYER2, DRYER3, DRYER4, DRYER5	63DDDD- DRYERB	40 CFR Part 63, Subpart DDDD	Limit total HAP to 20 ppmvd
GRP-PAINT	Plywood And Composite Wood Products	BOARDMARK, PB-1, PB-2	63DDDD-PAINT	40 CFR Part 63, Subpart DDDD	No changing attributes.
GRPRTOSTK	Emission Points/Stationary Vents/Process Vents	RTOEAST, RTOWEST	R111SUBA	30 TAC Chapter 111, Visible Emissions	No changing attributes.
PRESS	Plywood and Composite Wood Products	N/A	63DDDD-PRESSA	40 CFR Part 63, Subpart DDDD	Reduce total HAP by 90%
PRESS	Plywood and Composite Wood Products	N/A	63DDDD-PRESSB	40 CFR Part 63, Subpart DDDD	Limit total HAP to 20 ppmvd
PRO-TS	Surface Coating Operations	N/A	63QQQQ	40 CFR Part 63, Subpart QQQQ	No changing attributes.
RCOPRESS	Emission Points/Stationary Vents/Process Vents	N/A	R111-1	30 TAC Chapter 111, Visible Emissions	No changing attributes.

### **Unit Summary**

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
ТОН	Emission Points/Stationary Vents/Process Vents	N/A	R1151-1	30 TAC Chapter 111, Nonagricultural Processes	No changing attributes.
ТОН	Boilers/Steam Generators/Steam Generating Units	N/A	60SUBDC-TOH	40 CFR Part 60, Subpart Dc	No changing attributes.

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FWP-1	EU	63ZZZZ- FWP-1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6602- Table2c.1 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b) § 63.6640(f)(1) [G]§ 63.6640(f)(2) § 63.6640(f)(3)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at a major source, you must comply with the requirements as specified in Table 2c.1.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)- Table6.9.a.i § 63.6640(a)- Table6.9.a.ii § 63.6640(b)	§ 63.6625(i) § 63.6655(a) § 63.6655(d) § 63.6655(d) § 63.6655(e) § 63.6665(a) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(b) § 63.6640(e) § 63.6650(f)
GRPDRYER	EP	R1151-1	PM	30 TAC Chapter 111, Nonagricultural Processes	§ 111.151(a) § 111.151(b) § 111.151(c)	No person may cause, suffer, allow, or permit emissions of particulate matter from any source to exceed the allowable rates specified in Table 1 as follows, except as provided by §111.153 of this title (relating to Emissions Limits for Steam Generators).	** See CAM Summary	None	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPDRYER	EU	63DDDD- DRYERA	112(B) HAPS	40 CFR Part 63, Subpart DDDD	§ 63.2240-Table 1B(1) § 63.2233(b) § 63.2240(b) § 63.2240-Table 2(1) § 63.2250(a) § 63.2250(b) § 63.2271(a)-Table 7(1) § 63.2271(b)(2)	Reduce emissions of total HAP, measured as THC (as carbon), by 90 percent	\$ 63.2260(a) \$ 63.2260(b) \$ 63.2260(b)-Table 5(2) \$ 63.2261(a) \$ 63.2262(a) \$ 63.2262(a)-Table 4(1) \$ 63.2262(a)-Table 4(2) \$ 63.2262(a)-Table 4(3) \$ 63.2262(a)-Table 4(4) \$ 63.2262(a)-Table 4(4) \$ 63.2262(a)-Table 4(5) [G]§ 63.2262(b) \$ 63.2262(c) \$ 63.2262(c)	§ 63.2250(c) § 63.2269(a)(3) § 63.2270(b) § 63.2270(c) § 63.2270(f) § 63.2282(a)(1) § 63.2282(a)(2) § 63.2282(a)(4) § 63.2282(b) § 63.2283(a) § 63.2283(c)	§ 63.2233(d) § 63.2260(c) § 63.2271(b) § 63.2280(a) § 63.2280(b) § 63.2280(c) § 63.2280(d) § 63.2280(g) § 63.2280(g)(1) § 63.2281(a) § 63.2281(a)-Table 9 [G]§ 63.2281(c) [G]§ 63.2281(c) [G]§ 63.2281(c)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPDRYER	EU	63DDDD- DRYERB	112(B) HAPS	40 CFR Part 63, Subpart DDDD	§ 63.2240-Table 1B(2) § 63.2233(b) § 63.2240(b) § 63.2240-Table 2(1) § 63.2250(a) § 63.2250(b) § 63.2271(a)-Table 7(1) § 63.2271(b)(2)	Limit emissions of total HAP, measured as THC (as carbon), to 20 ppmvd	\$ 63.2260(a) \$ 63.2260(b) \$ 63.2260(b)-Table 5(3) \$ 63.2261(a) \$ 63.2262(a) \$ 63.2262(a)-Table 4(1) \$ 63.2262(a)-Table 4(11) \$ 63.2262(a)-Table 4(2) \$ 63.2262(a)-Table 4(3) \$ 63.2262(a)-Table 4(4) \$ 63.2262(a)-Table 4(4) \$ 63.2262(a)-Table 4(5) [G]\$ 63.2262(b) \$ 63.2262(b) \$ 63.2262(c) \$ 63.2262(c)	§ 63.2250(c) § 63.2269(a)(3) § 63.2270(b) § 63.2270(c) § 63.2270(f) § 63.2282(a)(1) § 63.2282(a)(2) § 63.2282(a)(4) § 63.2282(b) § 63.2283(a) § 63.2283(c)	§ 63.2233(d) § 63.2260(c) § 63.2271(b) § 63.2280(a) § 63.2280(b) § 63.2280(c) § 63.2280(d) § 63.2280(g) § 63.2280(g)(1) § 63.2281(a) § 63.2281(a) Table 9 [G]§ 63.2281(b) [G]§ 63.2281(c) [G]§ 63.2281(c) [G]§ 63.2281(g)
GRP-PAINT	EU	63DDDD- PAINT	112(B) HAPS	40 CFR Part 63, Subpart DDDD	§ 63.2241(a)-Table 3(5) § 63.2233(b) § 63.2250(a) § 63.2250(b) § 63.2260(b)-Table 6(5) § 63.2271(a)-Table 8(5)	Use non-HAP coatings as defined in §63.2292.	§ 63.2260(b) § 63.2261(b)	§ 63.2282(a) § 63.2282(a)(1) § 63.2282(b) § 63.2283(a) § 63.2283(b) § 63.2283(c)	§ 63.2233(d) § 63.2260(c) § 63.2271(b) § 63.2280(a) § 63.2280(b) § 63.2280(d) § 63.2280(d)(1)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPRTOSTK	EP	R111SUBA	PM (Opacity)	111, Visible	§ 111.111(a)(1)(B) § 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	. , , , , ,	§ 111.111(a)(1)(C) § 111.111(a)(1)(D)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
PRESS	EU	63DDDD-PRESSA	112(B) HAPS	40 CFR Part 63, Subpart DDDD	§ 63.2240-Table 1B(1) § 63.2233(b) § 63.2240(b) § 63.2240-Table 2(2) § 63.2250(a) § 63.2250(b) § 63.2257 § 63.2271(a)-Table 7(1) § 63.2271(a)-Table 7(4) § 63.2271(b)(2)	Reduce emissions of total HAP, measured as THC (as carbon), by 90 percent	\$ 63.2260(a) \$ 63.2260(b)-Table 5(2) \$ 63.2260(b)-Table 5(6) \$ 63.2261(a) \$ 63.2262(a)-Table 4(1) \$ 63.2262(a)-Table 4(11) \$ 63.2262(a)-Table 4(2) \$ 63.2262(a)-Table 4(3) \$ 63.2262(a)-Table 4(4) \$ 63.2262(a)-Table 4(4) \$ 63.2262(a)-Table 4(5) \$ 63.2262(a)-Table 4(9) [G]§ 63.2262(a)-Table 4(9) [G]§ 63.2262(b) \$ 63.2262(c) \$ 63.2262(c) \$ 63.2262(c) \$ 63.2262(d)(1) \$ 63.2262(e) \$ 63.2262(f) [G]§ 63.2262(f) [G]§ 63.2262(f) § 63.2262(f) § 63.2262(f) [G]§ 63.2269(f) § 63.2270(a) § 63.2270(a) § 63.2270(b)	§ 63.2250(c) § 63.2269(a)(3) § 63.2270(b) § 63.2270(d) § 63.2270(f) § 63.2282(a)(1) § 63.2282(a)(2) § 63.2282(a)(4) § 63.2282(b) § 63.2282(e) § 63.2283(a) § 63.2283(b) § 63.2283(c)	§ 63.2233(d) § 63.2260(c) § 63.2271(b) § 63.2280(a) § 63.2280(b) § 63.2280(c) § 63.2280(d) § 63.2280(g) § 63.2280(g)(1) § 63.2281(a) § 63.2281(a)-Table 9 [G]§ 63.2281(b) [G]§ 63.2281(c) [G]§ 63.2281(c) § 63.2281(g)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
PRESS	EU	63DDDD-PRESSB	112(B) HAPS	40 CFR Part 63, Subpart DDDD	§ 63.2240-Table 1B(2) § 63.2233(b) § 63.2240(b) § 63.2240-Table 2(2) § 63.2250(a) § 63.2250(b) § 63.2257(a)-Table 7(4) § 63.2271(b)(2)	Limit emissions of total HAP, measured as THC (as carbon), to 20 ppmvd	\$ 63.2260(a) \$ 63.2260(b) \$ 63.2260(b)-Table 5(3) \$ 63.2260(b)-Table 5(6) \$ 63.2261(a) \$ 63.2262(a) \$ 63.2262(a)-Table 4(11) \$ 63.2262(a)-Table 4(2) \$ 63.2262(a)-Table 4(3) \$ 63.2262(a)-Table 4(4) \$ 63.2262(a)-Table 4(4) \$ 63.2262(a)-Table 4(4) \$ 63.2262(a)-Table 4(9) [G]\$ 63.2262(b) \$ 63.2262(c) \$ 63.2262(c)	§ 63.2250(c) § 63.2269(a)(3) § 63.2270(b) § 63.2270(c) § 63.2270(d) § 63.2282(a)(1) § 63.2282(a)(2) § 63.2282(a)(4) § 63.2282(b) § 63.2282(e) § 63.2283(a) § 63.2283(b) § 63.2283(c)	§ 63.2233(d) § 63.2260(c) § 63.2271(b) § 63.2280(a) § 63.2280(b) § 63.2280(c) § 63.2280(d) § 63.2280(g) § 63.2280(g)(1) § 63.2281(a) § 63.2281(a)-Table 9 [G]§ 63.2281(b) [G]§ 63.2281(c) [G]§ 63.2281(c) § 63.2281(g)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
PRO-TS	EU	63QQQQ	112(B) HAPS	40 CFR Part 63, Subpart QQQQ	§ 63.4690(b) § 63.4700(a) § 63.4700(a)(1) § 63.4700(b) § 63.4742(a) § 63.4742(b)	If the affected source applies coating to other interior panels then the organic HAP emission limit for the affected source is 20 grams HAP/liter solids (0.17 lb HAP/gal solid).	§ 63.4741 § 63.4742	[G]§ 63.4731 § 63.4691 § 63.4730(a) § 63.4730(b) § 63.4730(c) § 63.4730(c)(1) § 63.4730(c)(2) § 63.4730(d) § 63.4730(f) § 63.4730(f) § 63.4730(g) § 63.4730(h) § 63.4742(d)	[G]§ 63.4710(c)(6) [G]§ 63.4710(c)(7) [G]§ 63.4720(a)(1) [G]§ 63.4720(a)(5) § 63.4710(a) § 63.4710(b) § 63.4710(c)(1) § 63.4710(c)(2) § 63.4710(c)(3) § 63.4710(c)(4) § 63.4710(c)(5) § 63.4710(c)(8) § 63.4710(c)(8) § 63.4710(c)(8) § 63.4710(c)(8) § 63.4710(c)(8) § 63.4720(a) § 63.4720(a)(3) § 63.4720(a)(3)(ii) § 63.4720(a)(3)(iii) § 63.4720(a)(4) § 63.4742(b) § 63.4742(b)
RCOPRESS	ЕР	R111-1	PM (Opacity)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
тон	EP	R1151-1	PM	30 TAC Chapter 111, Nonagricultural Processes	§ 111.151(a) § 111.151(b) § 111.151(c)	No person may cause, suffer, allow, or permit emissions of particulate matter from any source to exceed the allowable rates specified in Table 1 as follows, except as provided by §111.153 of this title (relating to Emissions Limits for Steam Generators).	** See CAM Summary	None	None
тон	EU	60SUBDC- TOH	SO <sub>2</sub>	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)
тон	EU	60SUBDC- TOH	PM	40 CFR Part 60, Subpart Dc	§ 60.43c(b)(1) § 60.40c(c) § 60.43c(b) § 60.43c(d)	Facilities firing the specified fuels with a heat input capacity of > 8.7 MW shall not discharge gases with PM in excess of 43 ng/J heat input if the facility has an ACF for wood greater than 30%.	\$ 60.45c(a) \$ 60.45c(a)(1) \$ 60.45c(a)(2) [G]\$ 60.45c(a)(3) \$ 60.45c(a)(4) \$ 60.45c(a)(5) \$ 60.45c(a)(6) [G]\$ 60.45c(a)(7)	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(b) § 60.48c(j)
тон	EU	60SUBDC- TOH	PM (Opacity)	40 CFR Part 60, Subpart Dc	§ 60.43c(c) § 60.40c(c) § 60.43c(d) § 60.47c(a) § 60.47c(b)	Facilities firing the specified fuels and that have heat input capacity of 8.7 MW (30 MMBtu/hr) or greater, shall not exhibit opacity greater than 20%, 6-minute average, except as specified.	§ 60.45c(a) § 60.45c(a)(8) § 60.47c(a) § 60.47c(b)	§ 60.47c(a) § 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(b) [G]§ 60.48c(c) § 60.48c(j)

# **Additional Monitoring Requirements**

Compliance Assurance Monitoring Summary	27
Periodic Monitoring Summary	31

Unit/Group/Process Information					
ID No.: GRPDRYER					
Control Device ID No.: WESP1	Control Device Type: Wet or Dry Electrostatic Precipitator				
Control Device ID No.: WESP2  Control Device Type: Wet or Divide Electrostatic Precipitator					
Applicable Regulatory Requirement					
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1151-1				
Pollutant: PM Main Standard: § 111.151(a)					
Monitoring Information					
Indicator: Secondary Voltage					
Minimum Frequency: once per day					
Averaging Period: n/a*					
Deviation Limit: A minimum secondary voltage shall be at least 25 KV.					
CAM Text: Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:  ± 2% of reading; or					

\*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

± 5% over its operating range.

Unit/Group/Process Information				
ID No.: GRPDRYER				
Control Device ID No.: WESP1	Control Device Type: Wet or Dry Electrostatic Precipitator			
Control Device ID No.: WESP2  Control Device Type: Wet or Electrostatic Precipitator				
Applicable Regulatory Requirement				
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1151-1			
Pollutant: PM Main Standard: § 111.151(a)				
Monitoring Information				
Indicator: Secondary Current				
Minimum Frequency: once per day				
Averaging Period: n/a*				
Deviation Limit: A minimum secondary current shall be at least 150 milliamperes and a maximum secondary current shall be at most 1 ampere.				
CAM Text: Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and				

 $\pm$  1% of reading; or

 $\pm$  5% over its operating range.

shall be accurate to within one of the following:

<sup>\*</sup>The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information				
ID No.: TOH				
Control Device ID No.: WESP1	Control Device Type: Wet or Dry Electrostatic Precipitator			
Control Device ID No.: WESP2	Control Device Type: Wet or Dry Electrostatic Precipitator			
Applicable Regulatory Requirement				
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1151-1			
Pollutant: PM Main Standard: § 111.151(a)				
Monitoring Information				
Indicator: Secondary Voltage				
Minimum Frequency: once per day				
Averaging Period: n/a*				
Deviation Limit: A minimum secondary voltage shall be at least 25 KV.				
CAM Text: Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:				

\*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

± 2% of reading; or

 $\pm$  5% over its operating range.

Unit/Group/Process Information				
ID No.: TOH				
Control Device ID No.: WESP1	Control Device Type: Wet or Dry Electrostatic Precipitator			
Control Device ID No.: WESP2	Control Device Type: Wet or Dry Electrostatic Precipitator			
Applicable Regulatory Requirement				
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1151-1			
Pollutant: PM	Main Standard: § 111.151(a)			
Monitoring Information				
Indicator: Secondary Current				
Minimum Frequency: once per day				
Averaging Period: n/a*				
Deviation Limit: A minimum secondary current shall be at least 150 milliamperes and a maximum secondary current shall be at most 1 ampere.				
CAM Text: Each monitoring device shall be calibrated at a frequency in accordance with the				

manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:

 $\pm$  1% of reading; or

 $\pm$  5% over its operating range.

<sup>\*</sup>The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

### **Periodic Monitoring Summary**

Unit/Group/Process Information					
ID No.: RCOPRESS					
Control Device ID No.: RTO3	Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer)				
Applicable Regulatory Requirement					
ame: 30 TAC Chapter 111, Visible Emissions SOP Index No.: R111-1					
Pollutant: PM (Opacity)  Main Standard: § 111.111(a)(1)(C)					
Monitoring Information					
Indicator: Combustion Temperature/Exhaust Gas Temperature					
Minimum Frequency: Once per week					
Averaging Period: n/a*					
Deviation Limit: Minimum combustion temperature = 960 degrees Fahrenheit					
Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber. The monitoring instrumentation shall be maintained, calibrated, and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.					

<sup>\*</sup>The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

# Permit Shield

mit Shield33
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### **Permit Shield**

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
GEN-1	N/A	40 CFR Part 63, Subpart ZZZZ	Existing emergency RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours/year meeting §63.6640(f)(2)(ii) and (iii).
GRPTKSMDI	R-3, R-4	40 CFR Part 60, Subpart Kb	Storage vessels have a capacity greater than or equal to 75 cubic meters and less than 151 cubic meters storing a liquid with a maximum true vapor pressure less than 15.0 kPa.
GRPTKSMDI_TS	R-3, R-4	30 TAC Chapter 115, Loading and Unloading of VOC	The tank units included in this group store VOCs other than gasoline and the units are located in a covered attainment county.
GRPTKSPF	R-1, R-2	30 TAC Chapter 115, Loading and Unloading of VOC	The tank units included in this group store VOCs other than gasoline and the units are located in a covered attainment county.
GRPTKSPF	R-1, R-2	40 CFR Part 60, Subpart Kb	Storage vessels have a storage capacity less than 75 cubic meters.
GRPTKSWAX	WAX1, WAX2	30 TAC Chapter 115, Loading and Unloading of VOC	The tank units included in this group store VOCs other than gasoline and the units are located in a covered attainment county.

### **Permit Shield**

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
GRPTKSWAX	WAX1, WAX2	40 CFR Part 60, Subpart Kb	Storage vessels have a storage capacity less than 75 cubic meters.
T-1	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	The tank unit is a motor vehicle fuel dispensing facility that is located in a covered attainment county.
T-1	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity less than 75 cubic meters.
T-3	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	The tank unit stores VOCs other than gasoline and the tank unit is located in a covered attainment county.
T-3	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity less than 75 cubic meters.
ТОН	N/A	30 TAC Chapter 112, Sulfur Compounds	Unit does not combust liquid fuels.
ТОН	N/A	40 CFR Part 60, Subpart D	The unit does not produce steam nor does it generate electricity.
ТОН	N/A	40 CFR Part 60, Subpart Da	The unit does not produce steam nor does it generate electricity.
ТОН	N/A	40 CFR Part 60, Subpart Db	The unit has a heat input capacity less than 100 million Btu/hr.

#### **Permit Shield**

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Gro	up/Process	Regulation	Basis of Determination	
ID No.	Group/Inclusive Units			
ТОН	N/A	, 1	The TOH exhaust is used for supplemental heat for the wafer dryers that are controlled by the WESP and RTO. Since the TOH emissions contact wafers, the emissions are subject to MACT DDDD (PCWP) rather than MACT DDDDD (Boiler and Process Heaters).	

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New Source Review Authorization References b	v Emission Unit	38

#### **New Source Review Authorization References**

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Prevention of Significant Deterioration (PSD) Permits					
PSD Permit No.: PSDTX832M5	Issuance Date: 05/16/2016				
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.					
Authorization No.: 22377	Issuance Date: 05/16/2016				
Permits By Rule (30 TAC Chapter 106) for	the Application Area				
Number: 106.261 Version No./Date: 12/24/1998					
Number: 106.261	Version No./Date: 09/04/2000				
Number: 106.261	Version No./Date: 11/01/2003				
Number: 106.262	Version No./Date: 09/04/2000				
Number: 106.262	Version No./Date: 11/01/2003				
Number: 106.263	Version No./Date: 11/01/2001				
Number: 106.264	Version No./Date: 09/04/2000				
Number: 106.433	Version No./Date: 03/14/1997				
Number: 106.433	Version No./Date: 09/04/2000				
Number: 106.472	Version No./Date: 09/04/2000				
Number: 106.473	Version No./Date: 09/04/2000				
Number: 51	Version No./Date: 06/07/1996				
Number: 106	Version No./Date: 06/07/1996				

#### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
BOARDMARK	Nail Line And Board Stamp Application Process	106.433/09/04/2000
DRYER1	Wafer Dryer 1	22377, PSDTX832M5
DRYER2	Wafer Dryer 2	22377, PSDTX832M5
DRYER3	Wafer Dryer 3	22377, PSDTX832M5
DRYER4	Wafer Dryer 4	22377, PSDTX832M5
DRYER5	Wafer Dryer 5	22377, PSDTX832M5
FWP-1	Fire Water Pump	22377, PSDTX832M5
GEN-1	Emergency Generator	22377, PSDTX832M5
PB-1	Paint Booth	22377, PSDTX832M5
PB-2	T and G Paint Booth	22377, PSDTX832M5
PRESS	OSB Press	22377, PSDTX832M5
PRO-TS	Tech Shield	106.433/03/14/1997
R-1	PF Tank 1	22377, PSDTX832M5
R-2	PF Tank 2	22377, PSDTX832M5
R-3	Tech Shield Glue Tank	22377, PSDTX832M5
R-4	MDI Tank	22377, PSDTX832M5
RCOPRESS	Press RTO / RCO	22377, PSDTX832M5
RTOEAST	East Dryer RTO Stack	22377, PSDTX832M5
RTOWEST	West Dryer RTO Stack	22377, PSDTX832M5

#### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
T-1	Gasoline Tank 1	22377, PSDTX832M5
T-3	Diesel Tank 1	22377, PSDTX832M5
ТОН	Thermal Oil Heater	22377, 106.264/09/04/2000, PSDTX832M5
WAX1	Wax Storage Tank 1	051/06/07/1996
WAX2	Wax Storage Tank 2	051/06/07/1996

	Appendix A		
Acronym List		 	41

## Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM	actual cubic feet per minute
	alternate means of control
	Acid Rain Program
	American Society of Testing and Materials
	Beaumont/Port Arthur (nonattainment area)
	Compliance Assurance Monitoring
	control device
	continuous opacity monitoring system
	closed-vent system
	Dallas/Fort Worth (nonattainment area)
	Designated Representative
	El Paso (nonattainment area)
EP	emission point
EPA	U.S. Environmental Protection Agency
	emission unit
	Federal Clean Air Act Amendments
	federal operating permit
	grandfathered
	grains per 100 standard cubic feet
	hazardous air pollutant
H/G/B	Houston/Galveston/Brazoria (nonattainment area)
H_S	hydrogen sulfide
	identification number
lb/hr	pound(s) per hour
	Million British thermal units per hour
	monitoring, recordkeeping, reporting, and testing
NA	nonattainment
	not applicable
	National Allowance Data Base
NO <sub>x</sub>	nitrogen oxidesNew Source Performance Standard (40 CFR Part 60)
NSPS	New Source Performance Standard (40 CFR Part 60)
	New Source Review
	Office of Regulatory Information Systems
	lead
	Permit By Rule
	particulate matter
	parts per million by volume
	prevention of significant deterioration
	Responsible Official
	sulfur dioxide
· · · · · · · · · · · · · · · · · · ·	Texas Commission on Environmental Quality
	total suspended particulate
	true vapor pressure
VOC	volatile organic compound

	Appendix B	
Major NSR Summary Table		43

Permit Number: 22377/PSDTX832M5 Issuand					e Date: May 16, 2016		
Emission	Source	Air Contaminant	Emission	n Rates (13)	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
		PM	10.51	37.44			
		PM10	10.51	37.44			
	Dryers 1-5	PM2.5	10.51	37.44			
DTOPACT /DTOMPCT (C)	Regenerative Thermal	VOC (12)	14.41	51.32	2 5 20 22 27 20 22	5, 20, 23, 27, 28, 32,	F 27 20
RTOEAST/RTOWEST (6)	Oxidizers	NOx	55.32	197.02	3, 5, 20, 23, 27, 28, 32	34	5, 27, 28
	Exhaust Stacks	SO2	2.18	9.55			
		СО	148.51	528.94			
		НСНО	2.45	8.74			
		PM	28.00	2.80			
		PM10	20.00	2.00			
	Dryers 1-5	PM2.5	20.00	2.00			
DRYER MSS (7)	Bypass Exhaust	VOC (12)	40.50	4.05			
	Stacks	NOx	3.50	0.35			
		СО	26.50	2.65			
		НСНО	2.27	0.23			
		PM	4.24	15.31			
		PM10	4.24	15.31			
	Press	PM2.5	4.24	15.31			
	Regenerative	VOC (12)	8.46	30.56			
RTOPRESS/	Thermal Oxidizer/	NOx	26.62	96.12	2 5 20 22 20 20	E 20 22 20 20 24	F 20 20
RCOPRESS	Regenerative	SO2	0.01	0.04	3, 5, 20, 23, 28, 30	5, 20, 23, 28, 30, 34	5, 28, 30
	Catalytic Exhaust	СО	53.28	192.40			
	Stack	НСНО	1.73	6.24			
		MDI	0.10	0.44			
		С6Н5ОН	1.44	5.19			
		PM	4.66	0.12			
DDECCVENT MCC	Press Bypasss	PM10	2.33	0.06			
PRESSVENT MSS	Exhaust Stack	PM2.5	2.33	0.06			
		VOC (12)	29.77	0.74			

nit Number: 2237	7/PSDTX832M5		Issuance	ee Date: May 16, 2016			
Emission	Source	Air Contaminant Emissi		n Rates (13)	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
		NOx	0.37	0.01			
		SO2	0.33	0.01			
		СО	0.90	0.02			
		НСНО	0.68	0.02			
		MDI	0.12	< 0.01			
		С6Н5ОН	0.34	0.01			
		PM	1.34	5.89			
C 1	Saw Line	PM10 (9)	1.34	5.89	20	20.24	30
S-1 Collector Baghouse Stack	PM2.5	1.34	5.89	30	30, 34	30	
	VOC (12)	3.35	12.45				
S-1 MSS (10) Saw Line Bypass Exhaust Stack	PM	4.03	0.20				
	PM10 (9)	4.03	0.20				
	Exhaust stack	PM2.5	4.03	0.20			
		PM	0.62	2.71			
		PM10 (9)	0.62	2.71			
		PM2.5	0.62	2.71			
C D	Aspiration	VOC (12)	15.37	57.08	20.22	20.24	1 20
S-2	System Baghouse Stack	НСНО	0.43	1.60	30, 33	30, 34	30
	Stack	MDI	< 0.01	0.02			
		С6Н5ОН	0.01	0.02			
		MeOH	7.07	26.25			
		PM	0.58	2.52			
		PM10 (9)	0.58	2.52			
S-3/4 Raw Fuel Bin Collector Baghouse Stack		PM2.5	0.58	2.52	20	20.51	20
		VOC (12)	7.88	29.25	30	30, 34	30
	НСНО	0.05	0.20	1			
	MeOH	0.12	0.46				
6.2 /4 M66 (10)	Raw Fuel Bypass	PM	3.46	0.35			
S-3/4 MSS (10)	Exhaust Stack	PM10 (9)	3.46	0.35			

it Number: 2237	7/PSDTX832M5			Issuance	e Date: May 16, 2016		
Emission	Source	Air Contaminant	Emission Rates (13)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
		PM2.5	3.46	0.35			
		PM	1.43	6.28			
		PM10 (9)	1.43	6.28			
		PM2.5	1.43	6.28	30		
S-5	Material Reject Collector	VOC (12)	2.60	9.67		30, 34	30
3-3	Baghouse Stack	НСНО	0.07	0.26	30	50, 54	30
	Bugilouse Stuck	MDI	< 0.01	< 0.01			
		С6Н5ОН	< 0.01	0.01			1
		МеОН	0.35	1.30			
	Tongue and	PM	1.12	4.93	30	30, 34	30
	Groove	PM10 (9)	1.12	4.93			
	Sanderdust	PM2.5	1.12	4.93			
	Collector Baghouse Stack	VOC (12)	1.51	5.62			
	Tongue and	PM	0.02	0.08	30	30, 34	30
o =	Groove Sander	PM10 (9)	0.02	0.08			
S-7	Transfer Bin	PM2.5	0.02	0.08			
	Baghouse Stack	VOC (12)	1.51	5.62			
		PM	0.71	3.10			
	Finished Fuel Bin	PM10 (9)	0.71	3.10		30, 34	30
S-8	Collector	PM2.5	0.71	3.10	30		
	Baghouse Stack	VOC (12)	5.87	21.81			
		MeOH	0.11	0.42			
S-9 Thermal Oil Heater Fuel System Collector Baghouse Stack		PM	0.39	1.69			
		PM10 (9)	0.39	1.69	30	30, 34	
		PM2.5	0.39	1.69			30
		VOC (12)	0.98	3.64			
	MeOH	0.02	0.07				
R-1	PF Tank 1	НСНО	0.02	0.01	31	31, 34	
R-2	PF Tank 2	НСНО	0.02	0.01	31	31, 34	

mit Number: 2237	7/PSDTX832M5		Issuance	nce Date: May 16, 2016			
Emission	Source	Air Contaminant	Emissio	n Rates (13)	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
R-3	MDI Tank 1	MDI	< 0.01	< 0.01	31	31, 34	
R-4	MDI Tank 2	MDI	< 0.01	< 0.01	31	31, 34	
T-1	Gasoline Tank	VOC (11)	0.30	0.66	31	31, 34	
T-3	Diesel Tank	VOC	0.10	< 0.01	31	31, 34	
		PM	0.04	0.17			
F-1	Fuel Pile (5)	PM10	0.04	0.17			
F-1	ruei Pile 🤲	PM2.5	0.04	0.17			
		VOC	0.40	1.76			
	Bark	PM	0.40	0.87			
BARK	Handling System	PM10	0.19	0.41	31	31, 34	
	(5)	PM2.5	0.03	0.06			
	_	PM	0.04	0.09		31, 34	
FINES	Excess Fuel System (5)	PM10	0.02	0.04	31		
	ruei system **	PM2.5	0.01	0.01			
		PM	0.22	0.98			
		PM10	0.22	0.98			
	Thermal Oil	PM2.5	0.22	0.98			
TOH-1 (8)	Heaters Bypass	VOC (12)	0.16	0.71	3, 4, 30, 32	4, 30, 32, 34	4, 30
	Stack	NOx	2.94	12.88			
		СО	2.47	10.82			
		SO2	0.02	0.08			
		PM	5.90	0.44			
		PM10	5.90	0.44			
GEN-1 Emergency Generator Exhaust Stack	PM2.5	5.90	0.44				
	VOC	0.20	0.01	3			
	Exhaust Stack	NOx	15.53	1.17			
		СО	7.11	0.53			
		SO2	4.25	0.32			
FWP-1	Fire Water Pump	PM	1.40	0.07	3, 5	5	5

Permit Number: 22377/	PSDTX832M5			Issuance	e Date: May 16, 2016		
Emission	Source	Air Contaminant	Emission	n Rates (13)	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
	Exhaust Stack	PM10	1.40	0.07			
		PM2.5	1.40	0.07			
		VOC	0.16	0.01			
		NOx	4.00	0.20			
		CO	3.45	0.17			
		SO2	1.04	0.05			
		PM	0.68	1.49			
PB-1	Paint Booth (5)	PM10	0.68	1.49	5	5	5
LD-1	Pallit Bootii ***	PM2.5	0.68	1.49	3	3	3
		VOC	1.54	3.37			
		PM	0.65	1.42			
pp 2	Tongue and	PM10	0.65	1.42	_	_	_
PB-2	Groove Paint Booth (5)	PM2.5	0.65	1.42	5	5	5
		VOC	1.46	3.19			

- (1) Emission point identification either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

 $NO_x$  - total oxides of nitrogen

SO<sub>2</sub> - sulfur dioxide

PM - total particulate matter, suspended in the atmosphere, including PM10 and PM2.5, as represented

 $PM_{10}$  - total particulate matter equal to or less than 10 microns in diameter, including PM2.5, as represented

 $PM_{2.5}$  - particulate matter equal to or less than 2.5 microns in diameter

CO - carbon monoxide

HCHO - formaldehyde

MDI - methylene-diphenyl-diisocyanate

C<sub>e</sub>H<sub>e</sub>OH - phenol

- MeOH methanol
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) Maximum combined emissions for both RTOs.
- (7) Represent total emissions from all 5 dryers. The total emissions for the 5 dryers were used in the modeling.
- (8) The thermal oil heaters vent to the atmosphere through this bypass stack only when these thermal oil heaters use natural gas as fuel. The main thermal oil heater uses wood dust as fuel and vents through the dryers exhaust stack (EPN RTOEAST/RTOWEST) when using wood as fuel. The backup thermal oil heater only uses natural gas as fuel and exhausts through EPN TOH-1 when in use.
- (9) Also counted as wood dust.
- (10) These are not additional EPNs but represent emissions from EPNs S-1 and S-3/4 during emergency shutdown.
- (11) VOC includes benzene.
- (12) VOCs are quantified as propane.
- (13) Planned startup and shutdown emissions are included, as well as planned maintenance activities identified in the Special Conditions Numbers 13 and 18 of this permit.



# Texas Commission on Environmental Quality Air Quality Permit

A Permit Is Hereby Issued To
Louisiana-Pacific Corporation
Authorizing the Construction and Operation of
Oriented Strandboard (OSB) Mill
Located at Jasper, Jasper County, Texas
Latitude 30° 53′ 40″ Longitude –93° 55′ 45″

Permits: 22377 and	PSDTX832M5
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Amendment Date: <u>May 16, 2016</u>

Expiration Date: September 24, 2024

For the Commission

- 1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)] <sup>1</sup>
- 2. **Voiding of Permit**. A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1)the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120]
- 3. **Construction Progress**. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
- 4. **Start-up Notification**. The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
- 5. **Sampling Requirements**. If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]

Revised (10/12)

- 6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
- 7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]
- 8. **Maximum Allowable Emission Rates**. The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)] <sup>1</sup>
- 9. **Maintenance of Emission Control**. The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC§ 116.115(b)(2)(G)]
- 10. **Compliance with Rules**. Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
- 11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
- 12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
- 13. **Emissions** from this facility must not cause or contribute to "air pollution" as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
- 14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit. <sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.

#### **Special Conditions**

Permit Numbers 22377 and PSDTX832M5

#### **Emission Limitations**

1. This permit authorizes only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and those sources are limited to the emission rates and other conditions specified in the table. In addition, this permit authorizes all emissions from planned maintenance, startup, and shutdown (MSS) activities associated with facilities or groups of facilities that are authorized by this permit. (10/14)

#### **Fuel Specifications**

- 2. Fuel for the five dryers and two thermal oil heaters shall be dry wood fines, oriented strand board (OSB) trim, sander dust, and/or pipeline-quality natural gas. Fuel for the thermal oxidizers shall be pipeline-quality natural gas. Fuel for the emergency generator and fire water pump shall be liquid fuel with a maximum sulfur content of not more than 0.05 percent by weight and shall not consist of a blend containing waste oils or solvents. Use of any other fuel will require prior written approval of the Executive Director of the Texas Commission on Environmental Quality (TCEQ).
- 3. Upon request by the Executive Director of the TCEQ or the TCEQ Regional Director or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuels used in these facilities or shall allow air pollution control program representatives to obtain a sample for analysis.

#### **Federal Applicability**

- 4. The two thermal oil heaters (the backup gas-fired unit and the main wood gas-fired unit) in this plant shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources in Title 40 Code of Federal Regulations (40 CFR) Part 60, specifically the following:
  - A. Subpart A General Provisions; and
  - B. Subpart Dc Small Industrial-Commercial-Institutional Steam Generating Units.
- 5. These facilities shall comply with all applicable requirements of the EPA regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories in 40 CFR Part 63, specifically the following:
  - A. Subpart A General Provisions;
  - B. Subpart DDDD Plywood and Composite Wood Products:
  - C. Subpart QQQQ Surface Coating of Wood Building Products; and

D. Subpart ZZZZ - Stationary Reciprocating Internal Combustion Engines.

#### **Opacity/Visible Emission Limitations**

- 6. Opacity of particulate matter emissions from the Thermal Oil Heater Bypass Stack (Emission Point Number [EPN] TOH-1]), the Press Regenerative Thermal Oxidizer (RTO)/Regenerative Catalytic Oxidizer (RCO) Exhaust Stack (EPN RTOPRESS/RCOPRESS), and the Dryers 1-5 Regenerative Thermal Oxidizers Exhaust Stacks (EPN RTOEAST/RTOWEST) shall not exceed 10 percent, averaged over a sixminute period, except during scheduled or planned maintenance, startup, or shutdown (MSS) activities (such as those times described in 30 Texas Administrative Code (30 TAC) § 101.211). (10/14)
- 7. Opacity of particulate matter emissions from the Saw Line Collector Baghouse Stack (EPN S-1), the Aspiration System Baghouse Stack (EPN S-2), the Raw Fuel Bin Collector Baghouse Stack (EPN S-3/4), the Material Reject Collector Baghouse Stack (EPN S-5), the Tongue and Groove Sander Dust Collector Baghouse Stack (EPN S-6), the Tongue and Groove Sander Transfer Bin Baghouse Stack (EPN S-7), the Finished Fuel Bin Collector Baghouse Stack (EPN S-8), and the Thermal Oil Heater Fuel System Collector Baghouse Stack (EPN S-9) shall not exceed 5 percent, averaged over a six-minute period, except during scheduled or planned maintenance, startup, or shutdown (MSS) activities (such as those times described in 30 Texas Administrative Code (30 TAC) § 101.211). (10/14)
- 8. Visible fugitive emissions from the log processing, bark handling system, and fuel handling areas, including the conveyor systems, and from each of the storage tanks for methylene-diphenyl-diisocyanate, phenol-formaldehyde resin, diesel, and gasoline shall not leave the property for more than 30 cumulative seconds in any six-minute period.

#### **Operational Limitations, Work Practices, and Plant Design**

- 9. Production is limited to a total maximum press daily throughput of 1,728,000 square feet (ft²) of OSB (on 3/8-inch basis), and a total maximum annual plant throughput of 520,000,000 ft² of 3/8-inch OSB processed as calculated by multiplying the number of times the press closes during an operating day (from 6:00 a.m. to 6:00 a.m.) times the finished area of the press (2,688 ft²) times the nominal thickness of the board produced and divided by 3/8-inch. These values should be summed for all thicknesses pressed in a given day to arrive at the daily production.
- 10. The facilities are authorized to operate up to 8,760 hours per year.
- 11. Fabric filter baghouses designed to meet an outlet grain loading of not more than 0.005 grains per dry standard cubic foot of exhaust each, properly installed and in good working order, shall control particulate matter emissions from the Saw Line, the Aspiration System, the Raw Fuel Bin, the Material Reject Collector, the Tongue and Groove Sander, the Tongue and Groove Sander Transfer Bin, the Finished Fuel Bin, and the Thermal Oil Heater Fuel System while this equipment is in operation.

- 12. Disposal of ash and baghouse dust shall be accomplished in a manner which will prevent the ash and baghouse dust from becoming airborne. There shall be no outside storage of the ash or baghouse dust unless in enclosed and/or covered containers.
- 13. Except as noted below, all air pollution abatement equipment shall be properly maintained and operated during the operation of these facilities. Cleaning and maintenance of the abatement equipment shall be performed as recommended by the manufacturer and as necessary so that the equipment efficiency can be adequately maintained.

In order to comply with the emission limitations specified in the maximum allowable emission rates table (MAERT), bypasses of the following systems shall be limited as indicated below. In the event that any of the limits are exceeded, the plant shall take immediate corrective actions to limit the reoccurrence of the bypass event.

Failure to take immediate corrective action to maintain the permitted maintenance, startup, and shutdown (MSS) emissions shall be regarded as a violation of this permit and additional control may be required to be implemented.

- A. Dryers 1-5 Bypass (EPN Dryer MSS): Dryer feed shall be shut down immediately when associated bypass damper opens. There shall be no more than 5 total dryer bypasses per hour, 10 per day (from 6:00 a.m. to 6:00 a.m.), and 1,000 per year.
- B. Saw line Bypass (EPN S-1 MSS): Saw line shall be shut down within 30 minutes of when the bypass damper opens, for a maximum of 90 minutes bypass operation per day and 100 hours per year.
- C. Raw Fuel Bypass (EPN S-3/4 MSS): Both the Dry Fines (CP-003) and Sawdust Transfer (CP-004) pneumatic conveyance transfer operations shall be shut down within 9 hours of when the bypass dampers open, for a maximum of 540 minutes bypass operations per day and 100 hours per year.

Only planned and routine start-up, shutdown, and maintenance operations are authorized by this permit. Emissions resulting from any unscheduled and/or unplanned startup, shutdown activity associated with a malfunction (emissions event and/or upset) are not authorized by this permit, and shall be included in any determination of compliance. Other MSS operations authorized by this permit include: baghouse bag changes; blowdown of the bark hog and bark entry box for EPN BARK; filter replacement for EPNs PB-1 and PB-2; blowdown of the interior of the mill (blowdown material transferred to EPN FINES); dry ice blasting of the interior of the mill (only carbon dioxide emission from the ice blasting in EPN RTOPRESS/RCOPRESS and main building); removal of ash from EPN TOH-1; and blow out of the Hammermill (blow out material transferred to EPN FINES) prior to maintenance. (10/14)

14. All hooding, duct, and collection systems shall be effective in capturing emissions from the intended equipment and in preventing fugitive emissions from the building. The hooding and duct systems shall be maintained free of holes, cracks, and other conditions that would reduce the collection efficiency of the emission capture system.

- 15. Replaced or used bags shall be disposed of in a manner that will prevent any dust from becoming airborne. The holder of this permit shall maintain a sufficient supply of spare bags for all baghouses at all times on the plant site.
- 16. All in-plant roads, truck loading and unloading areas, parking areas, and other traffic areas shall be sprinkled with water, and/or be paved (with a cohesive hard surface) and cleaned as necessary to maintain compliance with all applicable TCEQ rules and regulations.
- 17. The following referenced facilities are authorized by and operate per the criteria of the indicated Permit by Rule (PBR): (09/15)

**Table 1: Permit by Rule Authorizations** 

Authorized Change	PBR Registration No.	Date issued
End Notcher Project (end notch cutters) on the Tongues & Grooves (T & G) Line	123466	October 9, 2014
Thermal Oil Heater Backup Burner	122681	August 21, 2014
Saw Trim System and Fuel Pile Addition	79621	September 6, 2006
Side and End Notch System Addition	78164	March 10, 2006
Tub Grinder Addition	72873	August 18, 2004
Clean Resin-coated Wafer Recycling	75599	May 11, 2005
Fuel Reclaim System	70895	February 20, 2004
Surface Coating	55107	June 5, 2003
Orange Paint Booth Modification & Blender Drums Replacement	51969	January 31, 2003
Techshield Coating	49610	November 27, 2001

#### Bake-out Requirements for the RTO/RCO Equipment

- 18. Emissions during bake-outs shall be minimized by limiting the activity as follows: (10/14)
  - A. The Press and/or Dryers shall not operate during a bake-out of their respective control equipment; and
  - B. Periods of opacity greater than the limit for normal operation during bake-outs from the Press RTO/RCO (EPN RTOPRESS/RCOPRESS) and Dryer RTOs (EPN

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RTOEAST/RTOWEST) are authorized for no more than 260 hours per RTO/RCO or RTO in a calendar year.

#### **Sampling Requirements**

- 19. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at their own expense. Sampling ports and platforms shall be incorporated into the design of the stacks according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities" prior to stack sampling. Alternate sampling facility designs may be submitted for approval by the TCEQ Regional Office with jurisdiction.
- 20. During stack sampling emission testing, the facilities shall operate at maximum represented production/throughput rates. Primary operating parameters that enable determination of production rates shall be monitored and recorded during the stack test. These parameters are to be determined at the pretest meeting.
  - If the plant is unable to operate at the maximum represented production/throughput rates during testing, then additional stack testing shall be required when the OSB production rate exceeds the previous stack test production rate by +10 percent unless otherwise determined, in writing, by the TCEQ Executive Director.
- 21. If this facility or any portion of this facility exceeds any of the applicable allowable emission rates (ERs) or other standards, the holder of this permit shall take immediate corrective action to comply with the applicable standards. These actions may include (but are not limited to) reducing operating temperature, reducing throughput, and the installation of additional control equipment. These corrective actions shall not be considered complete until compliance with the allowable ER and other standards has been demonstrated. Additional testing may be required.
- 22. All five dryers shall be vented to EPN RTOEAST/RTOWEST through the wet electrostatic precipitator (WESP) and Dryer 1-5 RTOs, except during planned MSS activities. The OSB press enclosure shall be vented to EPN RTOPRESS/RCOPRESS through the RTO/RCO, except during planned MSS activities.
- 23. Existing or new stack sampling shall be used to establish the minimum average hourly RTO (EPN RTOEAST/RTOWEST and EPN RTOPRESS/RCOPRESS) central chamber temperatures. The average hourly RTO central chamber temperatures shall be maintained at or above these temperatures when associated production equipment is operational, unless future testing demonstrates compliance at lower temperatures.
- 24. The five dryers can operate at the same time only when both Dryer 1-5 RTOs (EPN RTOEAST/RTOWEST) are in operation. Only three dryers or less shall be allowed to operate when only one Dryer RTO is operating.

- 25. The two thermal oil heaters shall not be operated at the same time. The natural gas-fired thermal oil heater (installed per amendment request of September 20, 1996) shall remain strictly as a backup. The main thermal oil heater, when firing wood fuel, shall vent directly into the dryers and the emissions routed to the dryer RTOs. The main thermal oil heater can vent to the atmosphere through EPN TOH-1 only when firing natural gas.
- 26. Sampling shall be conducted in accordance with the TCEQ Sampling Procedures Manual and EPA Test Methods in 40 CFR Part 60, Appendix A, and 40 CFR Part 51, Appendix M, as follows:
  - A. Test Methods 1 through 4, as appropriate, for exhaust flow, diluent, and moisture concentration;
  - B. Test Method 5 or 17, modified with a controlled condensate method subject to approval from the TCEQ prior to sampling, for the concentration of total PM;
  - C. Test Method 5 or 17 for the filterable concentration of PM (front-half catch);
  - D. Test Method 5 or 201A, for the filterable concentration of PM<sub>10</sub> (front-half catch);
  - E. Test Methods 201A and 202 (or Test Method 5), modified with a controlled condensate method subject to approval from the TCEQ prior to sampling, for the concentration of  $PM_{10}$  including back-half condensibles;
  - F. Test Method 6, 6a, 6c, or 8 for the concentration of sulfur dioxide (SO<sub>2</sub>);
  - G. Test Method 7E, or equivalent methods, for the concentrations of nitrogen oxides (NO<sub>x</sub>);
  - H. Test Method 10 for the concentration of carbon monoxide (CO); and
  - I. Test Method 25A, modified to exclude methane and ethane, for the concentration of VOC (to measure total carbon as propane).

#### **Demonstration of Continuous Compliance**

- 27. Continuous monitoring and recordkeeping of opacity shall be performed at Dryer 1-5 RTO Exhaust Stacks (EPN RTOEAST/RTOWEST). The holder of this permit shall install, calibrate, and maintain a continuous opacity monitoring system (COMS) for monitoring opacity.
  - A. The COMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in Performance Specification Number 1, 40 CFR Part 60, Appendix B.
  - B. The COMS shall be zeroed and spanned daily and corrective action taken when the 24-hour span drift exceeds two times the amounts specified in 40 CFR Part 60, Appendix B or as specified by the TCEQ if not specified in Appendix B.

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- C. The opacity monitor shall complete a minimum of one cycle of data recording for each successive ten-second period. Six-minute averages shall be computed from at least 36 data points over a six-minute period. Data recorded during periods of COMS breakdowns, repairs, calibration checks, and zero span adjustments shall not be included in the computed data averages.
- 28. In lieu of continuous CO, VOC, and NO<sub>x</sub> monitors on EPN RTOEAST/RTOWEST, and on EPN RTOPRESS/RCOPRESS, the RTO/RCO central chamber temperature and RTO/RCO inlet pressure shall be recorded at least every 15 minutes and archived in one-hour averages. The average hourly RTO/RCO central chamber temperature shall be maintained at or above the temperature established during stack testing.

The press and press RCO system shall operate under negative pressure measured as RCO inlet pressure during normal plant operation. Additionally, the status of bypass dampers and the operating status of the associated equipment (i.e., dryers or press) shall be continuously monitored and sufficient data recorded to establish each period that a bypass damper is open while the equipment is generating uncontrolled emissions.

The number of dryers operated per RTO operated shall not exceed the number maintained during stack testing. Thermocouples used to measure RTO/RCO central chamber temperature shall be accurate within  $\pm$  0.75 percent of the temperature being measured, expressed in degrees Fahrenheit (°F) or  $\pm$  2.5°F and shall be calibrated annually. The RCO inlet pressure sensors shall be accurate to within ten percent or two inches of water, whichever is greater, and shall be calibrated annually.

Catalyst analysis from the press RCO shall be completed annually consistent with 40 CFR Part 63, Subpart DDDD if applicable.

- 29. If any opacity or parametric monitoring equipment fails to meet specified performance, it shall be repaired or replaced immediately, but no later than seven days after it was first detected by any employee at the facility, unless written permission is obtained from the TCEQ which allows for a longer repair/replacement time. The holder of this permit shall develop an operation and maintenance program (including stocking necessary spare parts) to ensure that the continuous monitors are available as required.
- 30. The holder of this permit shall conduct a quarterly visible emissions determination to demonstrate compliance with the opacity limitations specified in this permit for the Thermal Oil Heater Bypass Stack (EPN TOH-1]) and the Press Regenerative Thermal Oxidizer (RTO)/Regenerative Catalytic Oxidizer (RCO) Exhaust Stack (EPN RTOPRESS/RCOPRESS) the Saw Line Collector Baghouse Stack (EPN S-1), the Aspiration System Baghouse Stack (EPN S-2), the Raw Fuel Bin Collector Baghouse Stack (EPN S-3/4), the Material Reject Collector Baghouse Stack (EPN S-5), the Tongue and Groove Sander Dust Collector Baghouse Stack (EPN S-6), the Tongue and Groove Sander Transfer Bin Baghouse Stack (EPN S-7), the Finished Fuel Bin Collector Baghouse Stack (EPN S-8), and the Thermal Oil Heater Fuel System Collector Baghouse Stack (EPN S-9). This visible emissions determination shall be performed: 1) during normal plant operations, 2) for a minimum of six minutes, 3) approximately perpendicular to plume direction, 4) with the

sun behind the observer (to the extent practicable), and 5) at least two stack heights, but not more than five stack heights, from the emission point. If visible emissions are observed from the emission point, the owner or operator shall:

- A. Take immediate action to eliminate visible emissions, record the corrective action within 24 hours, and comply with any applicable requirements in 30 Texas Administrative Code (TAC) § 101.201, Emissions Event Reporting and Record Keeping Requirements; or
- B. Determine opacity using 40 CFR Part 60, Appendix A, Test Method 9. If the opacity limit is exceeded, take immediate action (as appropriate) to reduce opacity to within the permitted limit, record the corrective action within 24 hours, and comply with applicable requirements in 30 TAC § 101.201, Emissions Event Reporting and Record Keeping Requirements.
- 31. The holder of this permit shall conduct a quarterly visible emissions determination to demonstrate compliance with the visible emissions limitation specified in this permit. This visible emissions determination shall be performed: 1) during normal plant operations, 2) for a minimum of six minutes, 3) approximately perpendicular to plume direction, 4) with the sun behind the observer (to the extent practicable), 5) at least 15 feet, but not more than 0.25 mile, from the plume, and 6) in accordance with EPA 40 CFR Part 60, Appendix A, Test Method 22, except where stated otherwise in this condition. If visible emissions exceed 30 cumulative seconds in any six-minute period, the owner or operator shall take immediate action (as appropriate) to eliminate the excessive visible emissions. The corrective action shall be documented within 24 business hours of completion.

#### **Compliance Assurance Monitoring**

- 32. The holder of this permit shall monitor the secondary voltage and secondary current across the WESP controlling the thermal oil heater (EPN TOH-1) (when burning wood fuel), and the dryers that discharge to EPN RTOEAST/RTOWEST. The secondary voltage and secondary current shall be recorded at least once per day that the units operate. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate within the following:
  - $\pm$  2 percent of voltage reading; or  $\pm$  5 percent over its operating range.
  - $\pm$  1 percent of current reading; or  $\pm$  5 percent over its operating range.

A minimum secondary voltage shall be established using the most appropriate of the following: the most recent performance test data, the manufacturer's recommendations, engineering calculations, and/or historical data. A minimum and maximum secondary current shall be established using the most appropriate of the following: the most recent

- performance test data, the manufacturer's recommendations, engineering calculations and/or historical data.
- 33. The holder of this permit shall monitor the pressure drop across the Aspiration System Baghouse (EPN S-2), in accordance with the requirements specified in 40 CFR §64.7(c) at least once per day. The monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate within the following:
  - $\pm$  0.5 inches water gauge pressure ( $\pm$  125 pascals); or
  - $\pm$  0.5 percent of span.

A minimum pressure drop shall be established using the most appropriate of the following: the most recent performance test data, the manufacturer's recommendations, engineering calculations, and/or historical data.

#### **Recordkeeping Requirements**

- 34. Records shall be maintained at this facility site and made available at the request of personnel from the TCEQ or any other air pollution control program having jurisdiction to demonstrate compliance with permit limitations. These records shall be totaled for each calendar month, retained for a rolling 60-month period, and include the following:
  - A. Daily and annual records of the amount of OSB produced (on 3/8-inch basis);
  - B. Quarterly observations for visible emissions and opacity determinations as outlined in the Opacity/Visible Emission Limitations Section of this permit;
  - C. All malfunctions, repairs, and maintenance of abatement systems, which includes bag replacement and the manufacturers' suggested cleaning and maintenance schedule;
  - D. Parametric and opacity data required under this permit, including sampling records;
  - E. Monitoring data and support information as specified in 30 TAC § 122.144;
  - F. Inspections of capture systems and abatement devices shall be recorded as they occur; and
  - G. Number of hours of bake-out for each event and each control device and the cumulative annual total hours of bake-out for each control device. (10/14)

Date: September 23, 2015

#### Permit Numbers 22377 and PSDTX832M5

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

#### Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant	Emission	Rates (13)
Emission Form No. (1)	Source Name (2)	Name (3)	lbs/hour	TPY (4)
		PM	10.51	37.44
		$PM_{10}$	10.51	37.44
		$PM_{2.5}$	10.51	37.44
RTOEAST/RTOWEST (6)	Dryers 1-5 Regenerative Thermal	VOC (12)	14.41	51.32
RIOEASI/RIOWESI (0)	Oxidizers Exhaust Stacks	$NO_x$	55.32	197.02
		$SO_2$	2.18	9.55
		СО	148.51	528.94
		НСНО	2.45	8.74
		PM	28.00	2.80
		$PM_{10}$	20.00	2.00
		$PM_{2.5}$	20.00	2.00
DRYER MSS (7)	Dryers 1-5 Bypass Exhaust Stacks	VOC (12)	40.50	4.05
		$NO_x$	3.50	0.35
		CO	26.50	2.65
		НСНО	2.27	0.23
		PM	4.24	15.31
		$PM_{10}$	4.24	15.31
		$PM_{2.5}$	4.24	15.31
		VOC (12)	8.46	30.56
DTODDESS/DCODDESS	Press Regenerative Thermal	$NO_x$	26.62	96.12
RTOPRESS/RCOPRESS	Oxidizer/Regenerative Catalytic Oxidizer Exhaust Stack	$SO_2$	0.01	0.04
		СО	53.28	192.40
		НСНО	1.73	6.24
		MDI	0.10	0.44
		C <sub>6</sub> H <sub>5</sub> OH	1.44	5.19

Emission Sources - Maximum Allowable Emission Rates

Emission Boint No. (1)	Course Name (a)	Air Contaminant	Emission	Rates (13)
Emission Point No. (1)	Source Name (2)	Name (3)	lbs/hour	TPY (4)
		PM	4.66	0.12
		$PM_{10}$	2.33	0.06
		$PM_{2.5}$	2.33	0.06
		VOC (12)	29.77	0.74
DD ECCVENT MCC	Duoga Dymaga Eylhayat Ctaaly	$NO_x$	0.37	0.01
PRESSVENT MSS	Press Bypass Exhaust Stack	$SO_2$	0.33	0.01
		CO	0.90	0.02
		НСНО	0.68	0.02
		MDI	0.12	<0.01
		C <sub>6</sub> H <sub>5</sub> OH	0.34	0.01
		PM	1.34	5.89
0.4	Saw Line Collector Baghouse Stack	PM <sub>10</sub> (9)	1.34	5.89
S-1	(saw line pick-up point and resizer mill)	$PM_{2.5}$	1.34	5.89
		VOC (12)	3.35	12.45
		PM	4.03	0.20
S-1 MSS (10)	Saw Line Bypass Exhaust Stack	PM <sub>10</sub> (9)	4.03	0.20
		$PM_{2.5}$	4.03	0.20
		PM	0.62	2.71
		PM <sub>10</sub> (9)	0.62	2.71
	A suriousticas Constant Bank areas Charles	$PM_{2.5}$	0.62	2.71
0.0	Aspiration System Baghouse Stack (1 Core blender, 2 face blenders, 2	VOC (12)	15.37	57.08
S-2	core forming bins, and 2 face	НСНО	0.43	1.60
	forming bins)	MDI	<0.01	0.02
		C <sub>6</sub> H <sub>5</sub> OH	0.01	0.02
		МеОН	7.07	26.25
		PM	0.58	2.52
		PM <sub>10</sub> (9)	0.58	2.52
5 0/4	Raw Fuel Bin Collector Baghouse	$PM_{2.5}$	0.58	2.52
S-3/4	Stack	VOC (12)	7.88	29.25
		НСНО	0.05	0.20
		МеОН	0.12	0.46

Emission Boint No. (1)	Source Name (a)	Air	Emission	Rates (13)
Emission Point No. (1)	Source Name (2)	Contaminant Name (3)	lbs/hour	TPY (4)
		PM	3.46	0.35
S-3/4 MSS (10)	Raw Fuel Bypass Exhaust Stack	PM <sub>10</sub> (9)	3.46	0.35
		$PM_{2.5}$	3.46	0.35
		PM	1.43	6.28
		PM <sub>10</sub> (9)	1.43	6.28
		$PM_{2.5}$	1.43	6.28
S =	Material Reject Collector Baghouse	VOC (12)	2.60	9.67
S-5	Stack	НСНО	0.07	0.26
		MDI	<0.01	<0.01
		C <sub>6</sub> H <sub>5</sub> OH	<0.01	0.01
		МеОН	0.35	1.30
		PM	1.12	4.93
S-6	Tongue and Groove Sander Dust Collector Baghouse Stack (sander	PM <sub>10</sub> (9)	1.12	4.93
15-0	and edge profiler)	$PM_{2.5}$	1.12	4.93
		VOC (12)	1.51	5.62
		PM	0.02	0.08
S-7	Tongue and Groove Sander	PM <sub>10</sub> (9)	0.02	0.08
5-7	Transfer Bin Baghouse Stack	$PM_{2.5}$	0.02	0.08
		VOC (12)	1.51	5.62
		PM	0.71	3.10
	Finished Fuel Bin Collector	PM <sub>10</sub> (9)	0.71	3.10
S-8	Baghouse Stack (includes	$PM_{2.5}$	0.71	3.10
	hammermill)	VOC (12)	5.87	21.81
		МеОН	0.11	0.42
		PM	0.39	1.69
		PM <sub>10</sub> (9)	0.39	1.69
S-9	Thermal Oil Heater Fuel System Collector Baghouse Stack	$PM_{2.5}$	0.39	1.69
		VOC (12)	0.98	3.64
		МеОН	0.02	0.07
R-1	PF Tank 1	НСНО	0.02	0.01
R-2	PF Tank 2	НСНО	0.02	0.01

Emission Point No. (1)	Source Name (2)	Air Contaminant	Emission	Rates (13)
Emission I ome No. (1)	Source Name (2)	Name (3)	lbs/hour	TPY (4)
R-3	MDI Tank 1	MDI	<0.01	<0.01
R-4	MDI Tank 2	MDI	<0.01	<0.01
T-1	Gasoline Tank	VOC(11)	0.30	0.66
T-3	Diesel Tank	VOC	0.10	<0.01
		PM	0.04	0.17
E 4	Evel Pile (=)	$PM_{10}$	0.04	0.17
F-1	Fuel Pile (5)	$PM_{2.5}$	0.04	0.17
		VOC	0.40	1.76
	Bark Handling System	PM	0.40	0.87
BARK	(bark storage bin, conveyor drop	$PM_{10}$	0.19	0.41
	points, and truck loadout) (5)	$PM_{2.5}$	0.03	0.06
		PM	0.04	0.09
FINES	Excess Fuel System (5)	$PM_{10}$	0.02	0.04
		$PM_{2.5}$	0.01	0.01
		PM	0.22	0.98
		$PM_{10}$	0.22	0.98
		$PM_{2.5}$	0.22	0.98
TOH-1 (8)	Thermal Oil Heaters Bypass Stack	VOC (12)	0.16	0.71
		$NO_x$	2.94	12.88
		$SO_2$	0.02	0.08
		CO	2.47	10.82
		PM	5.90	0.44
		$PM_{10}$	5.90	0.44
		$\mathrm{PM}_{2.5}$	5.90	0.44
GEN-1	Emergency Generator Exhaust Stack	VOC	0.20	0.01
		$NO_x$	15.53	1.17
		$SO_2$	4.25	0.32
		СО	7.11	0.53

Emission Point No. (1)	Source Name (2)	Air Contaminant	Emission	Rates (13)
Emission Font No. (1)	Source Name (2)	Name (3)	lbs/hour	TPY (4)
		PM	1.40	0.07
		$PM_{10}$	1.40	0.07
		$PM_{2.5}$	1.40	0.07
FWP-1	Fire Water Pump Exhaust Stack	VOC	0.16	0.01
		$NO_x$	4.00	0.20
		$SO_2$	1.04	0.05
		CO	3.45	0.17
		PM	0.68	1.49
PB-1	Paint Booth (5)	$PM_{10}$	0.68	1.49
LD-1	Faint Booth (5)	$PM_{2.5}$	0.68	1.49
		VOC	1.54	3.37
		PM	0.65	1.42
DP o	Tongue and Groove Paint	$PM_{10}$	0.65	1.42
PB-2	Booth (5)	$PM_{2.5}$	0.65	1.42
		VOC	1.46	3.19

- (1) Emission point identification either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
  - NO<sub>x</sub> total oxides of nitrogen
  - SO<sub>2</sub> sulfur dioxide
  - PM total particulate matter, suspended in the atmosphere, including  $PM_{10}$  and  $PM_{2.5}$ , as represented
  - $PM_{10}$  total particulate matter equal to or less than 10 microns in diameter, including  $PM_{2.5}$ , as represented
  - PM<sub>2.5</sub> particulate matter equal to or less than 2.5 microns in diameter
  - CO carbon monoxide HCHO - formaldehyde
  - MDI methylene-diphenyl-diisocyanate
  - $C_6H_5OH$  phenol MeOH methanol
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) Maximum combined emissions for both RTOs.
- (7) Represent total emissions from all 5 dryers. The total emissions for the 5 dryers were used in the modeling.

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#### **Emission Sources - Maximum Allowable Emission Rates**

- (8) The thermal oil heaters vent to the atmosphere through this bypass stack only when these thermal oil heaters use natural gas as fuel. The main thermal oil heater uses wood dust as fuel and vents through the dryers exhaust stack (EPN RTOEAST/RTOWEST) when using wood as fuel. The backup thermal oil heater only uses natural gas as fuel and exhausts through EPN TOH-1 when in use.
- (9) Also counted as wood dust.
- (10) These are not additional EPNs but represent emissions from EPNs S-1 and S-3/4 during emergency shutdown.
- (11) VOC includes benzene.
- (12) VOCs are quantified as propane.
- (13) Planned startup and shutdown emissions are included, as well as planned maintenance activities identified in the Special Conditions Numbers 13 and 18 of this permit.

Date: November 25, 2014
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